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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,778	06/20/2003	Lane Scott Forman	TRNDP038	5939
22434	7590	07/02/2007	EXAMINER	
BEYER WEAVER LLP.			HOANG, PHUONG N	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/600,778	Applicant(s) FORMAN, LANE SCOTT	
	Examiner Phuong N. Hoang	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.


Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____


 WILLIAM THOMSON
 SUPERVISORY PATENT EXAMINER

4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 24 are pending for examination.
2. This office action is in response to application filed 6/20/03.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith, US patent no. 7,117,504.**

5. **As to claim 1**, Smith teaches a method of servicing (web services, figure 1) a client request (request from clients, figure 1) in a server comprising:

determining a first service interface subclass (select API 142 classes to service client request, figure 2 and associated text and col. 21 lines 44 – 50, col. 34 lines 30 – 35, col. 43 lines 55 – 65) corresponding to the client request from one or more service

interface subclasses derived from a request interface base abstract class (base class, figures 2 – 3 and associated text); and

servicing the client request (select API 142 classes to service client request, figure 2 and associated text and col. 21 lines 44 – 50, col. 34 lines 30 – 35, col. 43 lines 55 – 65) using the first service interface subclass, wherein the first service interface subclass corresponds to at least one service provided by the server at a corresponding port (port, col. 260 lines 35 – 55, col. 376 lines 35 - 50).

6. **As to claim 2**, Smith teaches wherein the one or more service interface subclasses comprise at least one protocol handler (protocol name, col. 260 lines 55 – 65) for servicing the client request at the corresponding port.

7. **As to claims 3 - 4**, Smith teaches wherein the first service interface subclass is determined from a configuration file (configuration, col. 43 lines 1 – 40) comprises descriptions of the one or more services provided by the server; and corresponding ports for the one or more services.

8. **As to claims 5 - 6**, Smith teaches wherein one of the one or more service interface subclasses is configured to service Simple Mail Transfer Protocol (figure 1 and associated text and col. 3 lines 60 – col. 4 lines 10) requests at the corresponding port.

9. **As to claims 7 - 8**, Smith teaches wherein a parent process performs the determining and servicing (figures 2 and 3 and associated text and col. 628 – col. 648) and creating one or more child processes, wherein the one or more child processes are configured to service client requests.
10. **As to claim 9**, Smith teaches creating one or more execution threads (threadpool, col. 10 lines 50 – 60) for each child process.
11. **As to claim 10**, Smith teaches selecting a socket (socket, col. 10 lines 5 – 15) requested by the client request; blocking the selected socket; and upon servicing the client request, unblocking the selected socket.
12. **As to claim 11**, Smith teaches wherein the at least one service includes a scanning service (scanner, col. 948 lines 28 – 35).
13. **As to claim 13**, Smith teaches adjusting a number of child processes according to a load of the server (col. 647).
14. **As to claim 13**, Smith teaches a server communication channel architecture for servicing at least one client request (web services, figure 1) a client request (request from clients, figure 1) on one or more socket ports (port, col. 260 lines 35 – 55, col. 376 lines 35 - 50) on a server, the service communication channel architecture comprising:

an abstract base class (root API namespace, col. 6 lines 29 – col. 8) describing one or more service interfaces, wherein each service interface is configured to service at least one client connection corresponding to the at least one client request on the one or more socket ports (port, col. 260 lines 35 – 55, col. 376 lines 35 - 50);

a process pool of one or more child processes (child, figures 2 and 3 and associated text and col. 628 – col. 648) wherein each child process is configured to create a pool of one or more execution threads (threadpool, col. 10 lines 50 – 60) configured to call the one or more service interfaces of the abstract base class for servicing the at least one client request.

15. **As to claim 14**, Smith teaches one or more subclasses (col. 9 lines 40 – col. 10) derived from the abstract base class and corresponding to the one or more service interfaces, wherein the one or more subclasses represent at least one service provided by the server at a particular socket port.

16. **As to claim 15**, Smith teaches at least one parent process configured to create at least one socket for the at least one client connection; create the one or more service interfaces of the abstract base class; create the process pool of one or more child processes; and monitor the one or more child processes (col. 10 lines 50 – 60).

17. **As to claims 16 – 17**, see rejection for claims 3 – 4 above.

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18. **As to claim 18**, Smith teaches wherein the one or more child processes are further configured to determine a number of client requests that can be serviced by each child process; and determine a number of execution threads to be created by each child process (manages groups of threads, col. 10 lines 50 – 60).

19. **As to claim 19**, Smith wherein the execution threads are configured for serial (synchronizing mutually-exclusive threads, col. 10 lines 50 – 60) access to the one or more socket ports.

20. **As to claims 20 - 21**, see rejection for claims 5 – 6 above.

21. **As to claim 22**, see rejection for claim 11 above.

22. **As to claim 23**, Smith teaches wherein a pointer (pointer, col. 6 lines 30 – 40) is used to indicate a particular service interface corresponding to a particular socket port of the client connection.

23. **As to claim 24**, Smith teaches wherein each execution thread is further configured to prior to calling the one or more service interfaces, determine one of the one or more socket ports corresponding to the at least one client request; and determine one of the one or more service interfaces corresponding to the client request

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(threading namespace 382 includes classes and interfaces Resolution, col. 10 lines 50 - 60).

Conclusion

24. The prior art made of record but not relied upon request is considered to be pertinent to applicant's disclosure.

Smith, US patent no. 7,017,162, demonstrating an interface for network software platform.

Shristenson, US patent no. 7,117,246, demonstrating an electronic mail system.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ph

June 25, 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER